

(11) What is claimed is:

1. A liquid crystal active-matrix display device comprising thin film transistors that switch picture elements and picture element electrodes that are arranged into a matrix, said picture element electrodes being connected to said thin film transistors and said thin film transistors being disposed at intersecting points that are formed by gate electrodes and source electrodes that are perpendicular to each other and being disposed on said gate electrodes and having drain electrodes connected to said picture element electrodes,

wherein the edge portion of each of said gate electrodes overlaps the edge portion of each of said picture element electrodes to form an additional capacitor, said gate electrodes being made of tantalum, and a first insulating film of tantalum pentoxide and a second insulating film of silicon nitride are disposed between each of said gate electrodes and each of said picture element electrodes.

2. A liquid crystal active-matrix display device according to claim 1, wherein each of said gate electrodes includes a gate line that extends from each of said gate electrodes in such a manner that it is positioned to overlap the periphery of the corresponding picture element electrode.

3. A liquid crystal active-matrix display device according to claim 1, wherein said gate electrodes function as additional-capacitor electrodes.

4. A liquid crystal active-matrix display device according to claim 1, wherein said first insulating film is formed by oxidizing the surface of each of said gate electrodes.

5

5. A liquid crystal active-matrix display device according to claim 1, wherein said second insulating film is formed by plasma chemical vapor deposition.

10

*add  
a's*